

REMARKS

A reconsideration is requested of Claims 1-22, 30 and 31, wherein independent Claim 1 has been amended.

As an initial matter, Claims 1-22 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being incomplete for omitting essential elements. As a result, Applicants have amended independent Claim 1 to recite one or two metallized layers instead of "no more than two metallized layers." Accordingly, withdrawal of the rejections based on 35 U.S.C. §112, second paragraph, is respectfully requested.

Claims 1-11, 14-19, 21, 22, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,034,813 to *Woodard et al.* in view of U.S. Patent No. 3,907,727 to *Lipp*

A disclosed embodiment of the present invention pertains to a solar control film. The film includes an adhesive layer for adhering the solar control film to a substrate. The film also includes one or two metallized layers and a scratch resistant layer. The scratch resistant layer contains dispersed carbon black particles wherein the one or two metallized layers is between the adhesive layer and the scratch resistant layer. These features are defined in independent Claim 1.

As described in the specification, incorporation of carbon black into a scratch resistant layer substantially reduces the visible light reflectives, while also attaining improved absorption of both infrared and ultraviolet radiation. It also provides a pleasing tint that does not fade over time compared to organic dyes. Neither *Woodard et al.*, taken

alone, or in combination with *Lipp*, disclose or suggest the features required by the presently claimed invention.

Woodard et al is directed to wavelength selective applied films with glare control. The solar control film disclosed therein is a complicated structure having multiple layers including an optically massive layer that prevents the constructive and destructive interference of reflected light. This structure is similar to the complicated control film structure described in the background of the invention of the present application. As conceded by the Examiner, *Woodard et al* fails to disclose that the scratch-resistant layer contains dispersed carbon black particles.

The Examiner seeks to rely on *Lipp* for disclosing this feature. While *Lipp* discloses dispersing carbon black in acrylic plastics, *Lipp* makes no mention of dispersing carbon black in a scratch resistant layer of a composite solar control film that includes one or two metallized layers and an adhesive layer.

Moreover, there is absolutely no motivation to include the feature of dispersing carbon black into the hard coat layer of *Woodard et al*. In particular, the complex solar control film in *Woodard et al* already addresses the problem of light transmittance, and resolves its problem through a complex composite of layers. In addition, as noted in Column 6, lines 64-65, a hard coat layer is described as not being critical to the invention. Accordingly, Applicant submits that one having ordinary skill in the art would not be motivated to combine the teaching of dispersing carbon black into plastics described in

Lipp in the hard coat layer of *Woodard et al.* Accordingly, neither *Woodard et al* nor *Lipp*, in combination or alone, disclose the patentable features of independent Claim 1.

Similarly, independent Claim 30 defines a solar control film comprising an adhesive layer for adhering the solar control film to a substrate. The film includes a metallized layer and a scratch resistant layer containing dispersed carbon black particles wherein the metallized layer is between the adhesive layer for adhering to a substrate and the scratch resistant layer. Independent Claim 30 further defines that the solar control film has a visible light transmittance of about 10% to about 80%, a visible light reflection of about 0% to about 8%, and a haze of less than about 7%.

As discussed above, neither *Woodard et al* nor *Lipp* disclose a feature of a scratch resistance layer containing dispersed carbon black particles. In addition, neither *Woodard et al* nor *Lipp* disclose the feature of a solar control film having a visible light transmittance of about 10% to about 80%, a visible light reflection of about 0% to about 8%, and a haze of less than about 7%.

Lipp teaches that either a single acrylate sheet impregnated with carbon black or an impregnated acrylate sheet sandwiched between teflon sheets possesses a relatively low haze. However, nothing contained in *Lipp* suggests that a similar haze value is possessed by the laminate described by *Woodard et al*, much less a laminate having those features recited in independent Claim 30. In other words, the haze value attributed to the single sheet, or an entirely different laminate of *Lipp* is not probative with regard to the haze value of the complicated multi-component laminate structure of *Woodard et al*, or for that



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FEB 23 2004

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matter, the laminate construed according to the requirements of the presently claimed invention.

For at least the foregoing reasons, it is submitted that the solar control film of independent Claims 1 and 30, and the claims depending therefrom, is patentably distinguishable over the applied documents. Accordingly, withdrawal of the objections of record and allowance of this application are earnestly solicited.

Should any questions arise in connection with this application, or should the Examiner believe a telephone conference would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that she be contacted at the number indicated below.

Respectfully submitted,

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Date: February 17, 2004

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